

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Service Products, Inc.  
Attn: Ms. Heidi Horst, Co-President  
5900 West 51st Street  
Chicago, Illinois 60638

Application No.: 73060235 I.D. No.: 031821AAR  
Applicant's Designation: Date Received: July 19, 2001  
Subject: Hardboard Product Manufacturing Facility  
Date Issued: Expiration Date:  
Location: 5900 West 51st Street, Chicago, 60638

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of one boiler, one wood fired incinerator equipped with an auxiliary burner, a paint flash-off tunnel/dryer, 25 wood working machines with cyclones and baghouses, one saw dust brush, one flow coating operation, and one spray booth pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 25 tons/year for volatile organic material (VOM)). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. Emissions and operation of paint flash-off tunnel/dryer, flow coating operation, and spray booth shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>VOM Content</u> (Lb VOM/Gal)	<u>VOM Emissions</u>	
	(Gal/Mo)	(Gal/Yr)		(Lb/Mo)	(T/Yr)
Coatings	338	4,048	5.79	1,957.02	11.72
Thinners/Solvent	284	3,397	7.03	1,996.52	11.94
				Total	23.66

These limits are based on maximum material usage, maximum VOM content of material, and material balance as provided in the permit application. Compliance with annual limit shall be determined on a monthly basis from the sum of data for current month plus the preceding 11 months.

- b. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Agency. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Agency.
- 3a. Permittee shall maintain records of the following items for paint flash-off tunnel/dryer, flow coat operation, and spray booth:
  - i. Coatings, thinners, and solvent usage (gallons/month and gallons/year).
  - ii. VOM content of each coating, thinner, and solvent used (lb VOM/gal).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Agency and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Agency request for records during the course of a source inspection.
- 4. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Agency's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 5a. Natural gas shall be the only fuel fired in the boiler and paint flash-off tunnel/dryer.
- b. Emissions and operation of the equipment shall not exceed the following limits:

<u>Equipment</u>	<u>Firing Rate (10<sup>6</sup> Btu/Hr)</u>	<u>E M I S S I O N S</u>			
		<u>Nitrogen Oxides</u>		<u>Carbon Monoxide</u>	
		<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Boiler	4.2	0.2	1.8	0.2	1.6
Paint Flash-Off Tunnel/Dryer	0.5	0.03	0.3	0.02	0.2

These limits are based on the maximum firing rate, operating hours (8,760 hr/yr), and standard AP-42 emission factors for combustion of natural gas.

6. Emissions and operation of wood incinerator shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Process Weight Rate</u>				
	<u>Wood (Lb/Hr)</u>	<u>Particulate Matter (Lb/Hr)</u>	<u>Matter (T/Yr)</u>	<u>Carbon Monoxide (Lb/Hr)</u>	<u>Monoxide (T/Yr)</u>
Incinerator	373	0.25	1.10	0.4	1.75

The limits of particulate matter are based on the information provided in permit application and 35 Ill. Adm. Code 212.181(d). The limit of carbon monoxide are based on the standard emission factor.

7. The combustion chamber shall be preheated by the auxiliary burner to a temperature of 1400°F before the introduction of any wood waste as indicated by a temperature indicator. The temperature of the combustion chamber shall be maintained 1400°F during the burning of the wood waste.
8. Wood fuel shall be limited to that indicated in the permit request, i.e., 99% wood sawdust, 1/2% vegetable oil and 1/2% ferric sulfate.
9. This permit is issued based on negligible emissions of particulate matter from 25 wood working machines. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
10. This permit is issued based on negligible emissions of particulate matter from one pre oven sawdust brush. For this purpose emissions of each contaminant shall not exceed nominal emission rates of 0.05 lb/hr and 0.22 ton/yr.
11. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: coatings usage, thinner/solvent usage, and VOM content of each coating, thinner and solvent used. If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.
12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
1340 North Ninth Street  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Agency's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

If you have any questions on this, please call Jim Kallmeyer at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

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cc: IEPA, FOS Region 1  
IEPA, Compliance Section  
USEPA

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from hardboard products manufacturing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 25 tons per year of VOM at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

1. Emissions and operation of paint flash-off tunnel/dryer, flow coating operation, and spray booth shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>VOM Content</u> (Lb VOM/Gal)	<u>VOM Emissions</u>	
	(Gal/Mo)	(Gal/Yr)		(Lb/Mo)	(T/Yr)
Coatings	338	4,048	5.79	1,957.02	11.72
Thinners/Solvent	284	3,397	7.03	1,996.52	<u>11.94</u>
				Total	<u>23.66</u>

These limits are based on maximum material usage, maximum VOM content of material, and material balance as provided in the permit application. Compliance with annual limit shall be determined on a monthly basis from the sum of data for current month plus the preceding 11 months.

2. Emissions and operation of the equipment shall not exceed the following limits:

<u>Equipment</u>	<u>Firing Rate</u> (10 <sup>6</sup> Btu/Hr)	<u>E M I S S I O N S</u>			
		<u>Nitrogen Oxides</u> (Ton/Mo)	<u>(Ton/Yr)</u>	<u>Carbon Monoxide</u> (Ton/Mo)	<u>(Ton/Yr)</u>
Boiler	4.2	0.2	1.8	0.2	1.6
Paint Flash-Off Tunnel/Dryer	0.5	0.03	0.3	0.02	0.2

These limits are based on the maximum firing rate, operating hours (8,760 hr/yr), and standard AP-42 emission factors for combustion of natural gas.

3. Emissions and operation of wood incinerator shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Process</u> <u>Weight Rate</u> <u>Wood</u>	<u>Particulate Matter</u>		<u>Carbon Monoxide</u>	
	(Lb/Hr)	(Lb/Hr)	(T/Yr)	(Lb/Hr)	(T/Yr)
Incinerator	373	0.25	1.10	0.4	1.75

The limits of particulate matter are based on the information provided in permit application and 35 Ill. Adm. Code 212.181(d). The limit of carbon monoxide are based on the standard emission factor.

4. This permit is issued based on negligible emissions of particulate matter from 25 wood working machines. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
5. This permit is issued based on negligible emissions of particulate matter from one pre oven sawdust brush. For this purpose emissions of each contaminant shall not exceed nominal emission rates of 0.05 lb/hr and 0.22 ton/yr.

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## PROJECT SUMMARY

### I. INTRODUCTION

Service Products, Inc., has submitted an application to renew the Federally Enforceable State Operating Permit (FESOP) for their manufacturing hardboard product operation at 5900 West 51st Street, Chicago. These FESOP limits would prevent the facility from being a major source of emissions so that an operating permit does not have to be obtained under the Clean Air Act Permit Program (CAAPP). The limitations would be accompanied by recordkeeping and reporting requirements to assure that the facility is operated as a non-major source. These conditions would be enforceable by both the State of Illinois and the USEPA.

### II. SOURCE DESCRIPTION

The Service Products, Inc. operates one boiler, one wood fired incinerator with auxiliary burner, a paint flash-off tunnel/dryer, 25 woodworking machines with the cyclones and baghouses, one saw dust brush, one flow coating oven, and one spray booth. This equipment is used for manufacturing the hardwood products. The paint flash-off tunnel/dryer and one spray booth use solvent-based coatings.

### III. EMISSIONS

The principal air contaminant of concern for any type of coating operation is Volatile Organic Material (VOM) from the solvent contained in the coatings, and the cleaning solutions. The majority of VOM emission from Service Products, Inc. can be attributed to the use of solvent-based coating in the paint flash-off tunnel/dryer and spray booth operation. The tunnel/dryer and boiler use natural gas fuel. The incinerator uses the wood waste generated at the facility.

### IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board emission standards. The board's emission standards represent the basic requirements for sources in Illinois. This project readily complies with all applicable Board standards.

### V. PROPOSED PERMIT

The conditions of the proposed permit contain limitations and requirements to assure that this facility will be operated as a non-major source. The emission limitations are based on the proposed maximum usage limits of coatings, thinner, and solvents and the VOM content of these materials.

The permit conditions also establish appropriate compliance procedures, including recordkeeping and reporting requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the coating operations are operating within the limitations set by the permit.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that Service Products, Inc. meets all applicable state and federal air pollution control requirements, subject to the permit conditions. The Illinois EPA is therefore proposing to renew this permit with federally enforceable limits for this operation.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public concern is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 164.

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